Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of the claims in the application:

1. (Currently Amended) A method of forming a plurality of two-way radiation beams using a transmit and receive system, the method comprising:

controlling a transmit antenna array of the transmit and receive system to provide a plurality of transmit radiation beams;

controlling a switched beam combining circuit of a receive antenna array of the transmit and receive system to formsense a plurality of receive radiation beams; and

combining predetermined ones of the plurality of transmit beams and predetermined ones of the plurality of receive beams to form the plurality of two-way radiation beams.

2. (Original) The method of claim 1, wherein controlling the transmit antenna array includes controlling a beam switching system coupled to the transmit antenna array to provide the plurality of transmit radiation beams.

3. (Original) The method of claim 1, wherein controlling the receive antenna array includes controlling a beam combining system coupled to the receive antenna array to provide the plurality of receive radiation beams.

4. (Original) The method of claim 1, wherein combining includes combining a first transmit radiation beam of the plurality of transmit radiation beams with a first receive radiation beam of the plurality of receive radiation beams to provide a first two-way radiation beam of the plurality of two-way radiation beams.

5. (Original) The method of claim 4, wherein combining further includes combining the first transmit radiation beam of the plurality of transmit radiation beams with a second receive radiation beam of the plurality of receive radiation beams to provide a second two-way radiation beam of the plurality of two-way radiation beams.

6. (Original) The method of claim 5, wherein combining further includes combining a second transmit radiation beam of the plurality of transmit radiation beams with the second receive radiation beam of the plurality of receive radiation beams to provide a third two-way radiation beam of the plurality of two-way radiation beams.

7. (Original) The method of claim 6, wherein combining further includes combining the second transmit radiation beam of the plurality of transmit radiation beams with a third receive radiation beam of the plurality of receive radiation beams to provide a fourth two-way radiation beam of the plurality of two-way radiation beams.

8. (Original) The method of claim 7, wherein combining further includes combining the second transmit radiation beam of the plurality of transmit radiation beams with a fourth receive radiation beam of the plurality of receive radiation beams to provide a fifth two-way radiation beam of the plurality of two-way radiation beams.

9. (Original) The method of claim 8, wherein combining further includes combining a third transmit radiation beam of the plurality of transmit radiation beams with the fourth receive radiation beam of the plurality of receive radiation beams to provide a sixth two-way radiation beam of the plurality of two-way radiation beams.

10. (Original) The method of claim 9, wherein combining further includes combining the third transmit radiation beam of the plurality of transmit radiation beams with a fifth receive radiation beam of the plurality of receive radiation beams to provide a seventh two-way radiation beam of the plurality of two-way radiation beams.

11. (Original) The method of claim 10, wherein combining further includes combining the third transmit radiation beam of the plurality of transmit radiation beams with a sixth receive radiation beam of the plurality of receive radiation beams to provide an eighth two-way radiation beam of the plurality of two-way radiation beams.

12. (Original) The method of claim 11, wherein combining further includes combining a fourth transmit radiation beam of the plurality of transmit radiation beams with the sixth receive radiation beam of the plurality of receive radiation beams to provide a ninth two-way radiation beam of the plurality of two-way radiation beams.

13. (Original) The method of claim 12, wherein combining further includes combining the fourth transmit radiation beam of the plurality of transmit radiation beams with a seventh receive radiation beam of the plurality of receive radiation beams to provide a tenth two-way radiation beam of the plurality of two-way radiation beams.

14. (Original) The method of claim 4, wherein combining further includes combining a second transmit radiation beam of the plurality of transmit radiation beams with the first receive radiation beam of the plurality of receive radiation beams to provide a second two-way radiation beam of the plurality of two-way radiation beams.

15. (Original) The method of claim 14, wherein combining further includes combining the second transmit radiation beam of the plurality of transmit radiation beams with a second receive radiation beam of the plurality of receive radiation beams to provide a third two-way radiation beam of the plurality of two-way radiation beams.

16. (Original) The method of claim 15, wherein combining further includes combining a third transmit radiation beam of the plurality of transmit radiation beams with the second receive radiation beam of the plurality of receive radiation beams to provide a fourth two-way radiation beam of the plurality of two-way radiation beams.

17. (Original) The method of claim 16, wherein combining further includes combining the third transmit radiation beam of the plurality of transmit radiation beams with a third receive radiation beam of the plurality of receive radiation beams to provide a fifth two-way radiation beam of the plurality of two-way radiation beams.

18. (Original) The method of claim 17, wherein combining further includes combining a fourth transmit radiation beam of the plurality of transmit radiation beams with the third receive radiation beam of the plurality of receive radiation beams to provide a sixth two-way radiation beam of the plurality of two-way radiation beams.

19. (Original) The method of claim 18, wherein combining further includes combining the fourth transmit radiation beam of the plurality of transmit radiation beams with a fourth receive radiation beam of the plurality of receive radiation beams to provide a seventh two-way radiation beam of the plurality of two-way radiation beams.

20. (Original) A transmit and receive system comprising:

a first array including a first plurality of antenna element disposed to provide a transmit antenna;

a second array including a second plurality of antenna elements disposed to provide a receive antenna;

a beam switching system coupled to the first array and being operative to form a plurality of transmit beams; and

a beam combining system coupled to the second array and being operative to form a plurality of receive beams, wherein predetermined one of the plurality of transmit beams and predetermined ones of the plurality of receive beams are combined to form a plurality of two-way beams.